



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

JAN 10 2012

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Article Number: 7006 2760 0000 8644 9405

Mr. James Jura
CEO and General Manager
Associated Electric Cooperative, Inc
P.O. Box 754
Springfield, MO 65801

RE: Supplemental Request for Information Pursuant to Section 114(a) of the Clean Air Act
Regarding EPA's Coal-fired Power Plant Investigations

Dear Mr. Jura:

Pursuant to Section 114(a) of the CAA, 42, U.S.C. §7414(a), the EPA is authorized to require any person who owns and/or operates an emissions source or any person who the EPA may believe may have responsive information to provide information for the purpose of carrying out any provision of the CAA, including the New Source Review (Prevention of Significant Deterioration (PSD)) permitting program, 42 U.S.C. §§ 7470-7492. In order for the EPA to carry out its PSD review, oversight, and enforcement authorities under the Act, including 42 U.S.C. § 7477, you are hereby required, pursuant to Section 114(a) of the CAA, to provide responses to the following questions and requests for information regarding the New Madrid and Thomas Hill Power Stations.

Enclosure 1 outlines the information requested and required submission of this information within thirty (30) calendar days following receipt of this information request. Enclosure 2 includes instructions and definitions to be used for filing your response, and Enclosure 3 contains procedures for declaring any of the information as confidential business information. Your responses should be sent to:

U.S. Environmental Protection Agency, Region 7
Air Permitting and Compliance Branch (AWMD/APCO)
901 North 5th Street
Kansas City, Kansas 66101
Attention: Lisa Hanlon

If you anticipate being unable to respond fully to this request within the time period specified, you must submit a sworn declaration by a responsible corporate official within twenty (20) calendar days after your receipt of this letter, specifying what information will be provided within the time specified, describing what efforts have been or are being made to obtain other responsive information and providing a detailed schedule of when such other responsive information can be provided. Upon receipt and based upon such declaration, the EPA may extend the time in which responsive information must be provided.



Your response to this requested information must be certified by a duly authorized officer or agent of AECl by signing the enclosed Statement of Certification (see Enclosure 5) and returning it with your response. All information submitted in response to this request must be certified as true, correct, accurate, and complete by an individual with sufficient knowledge and authority to make such representations on behalf of AECl.

A knowing submittal of false information in response to this request may be actionable under Section 113(c)(2) of the CAA, 42 U.S.C. § 7413(c)(2), as well as 18 U.S.C. §§ 1001 and 1341. AECl should also be aware that a failure to comply fully with the terms of this request may subject it to an enforcement action under Section 113 of the CAA, 42 U.S.C. §7413.

This letter in no way affects the obligations of AECl to comply with other local, State, and Federal laws and regulations. In addition, nothing in this letter shall be construed to be a waiver by the EPA of any rights or remedies under the Clean Air Act.

The requirements of this letter are not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501, *et. seq.*

If you have any questions concerning this matter, please contact Lisa Hanlon at (913) 551-7599 or Sarah LaBoda, Office of Regional Counsel at (913) 551-7424.

Sincerely,



Becky Weber, Director
Air and Waste Management Division

Enclosures: Information Request
Presumed Completion of Capital Projects
Instructions and Definitions
Confidential Business Information
Statement of Certification

cc: Patrick Baumhouer, Associated Electric Cooperative, Inc
Todd Tolbert, Associated Electric Cooperative, Inc.
Kyra Moore, Missouri Department of Natural Resources
Seema Kakade, EPA -Headquarters

ENCLOSURE 1
Information Request

Provide the following information using the instructions and definitions provided in Enclosure 2.

1. (a) Provide a list of all capital projects for each *coal-fired boiler at New Madrid Power Station and Thomas Hill Power Station* for which:

- i. actual or authorized expenditures were \$250,000 or more,
- ii. began actual construction after September 16, 2009, and
- iii. which have not been previously provided to EPA.

- (b) The list should include, but is not limited to, the following information:

- i. the work order number,
- ii. project description,
- iii. authorized expenditure,
- iv. actual expenditure,
- v. date of approval,
- vi. project completion date,
- vii. in-service date, and
- viii. each original equipment manufacturer (OEM), equipment suppliers, or contractors that will provide or have provided engineering, fabrication, and/or installation services for the project.

- (c) The list should include, but is not limited to, the following types of capital projects:

- i. boiler casing and boiler floor/wall tube replacements,
- ii. economizer, reheater(s), primary and secondary superheaters, steam drums, and/or primary and secondary air pre-heater replacements,
- iii. induced draft (ID) fans, forced draft (FD) fans, primary air fans and fan motor replacements,
- iv. condenser, boiler feed pump and/or feed water heater replacements,
- v. flue gas recirculation (FGR) replacements or deactivations,

- vi. pulverizer, exhauster, burner, and/or cyclone replacements,
- vii. balanced draft conversion projects,
- viii. turbine rotor and shell replacements, turbine efficiency upgrades, turbine upgrades to increase throttle steam flow and projects designed to make use of under-utilized turbine throttle steam flow,
- ix. low-NOX burner (LNB), overfire air, staged combustion, gas or coal reburn installation and modifications/retrofits including any model or size changes made to the burners of any unit, and including changes to the ignitors [i.e., include model and size in mmBtu/hr)],
- x. scrubber retrofits and/or design change projects,
- xi. selective catalytic reduction (SCR), non selective catalytic reduction (NSCR) or selective non-catalytic reduction (SNCR) system retrofits and/or design change projects,
- xii. any electrostatic precipitator (ESP) or fabric filter retrofits or design changes,
- xiii. coal handling system changes to increase feed rate or other changes to coal preparation, and
- xiv. changes made to equipment to accommodate the burning of fuel in each boiler. Such alternative fuels include, but are not limited to, different coal grades, oil, petroleum coke, tire derived fuel, and biomass.

(d) The preferred format for the list is in Excel or comma separated value (CSV) format compatible with personal computers running the Microsoft Windows XP operating system software or newer.

2. After EPA has received the list of capital projects identified in Request No. 1, EPA will narrow the list of capital projects, for which it seeks the information. For all projects on the narrowed list that EPA provides to AECI, provide a copy of all *documents* related to the capital projects on said list within 30 days including, but not limited to, the following:
 - a. all associated *capital appropriation requests* and approvals,
 - b. outage reports,
 - c. total project cost, including all costs incurred by other owners and/or operators,
 - d. the project completion date,
 - e. the date the unit returned to commercial operation following the completion of the capital project, including in-service reports,

- f. equipment specifications,
- g. cost/benefit analyses,
- h. all alternative option analyses,
- i. a copy of all emissions calculations performed before and after the capital project was completed,
- j. all engineering analyses and/or *performance* tests showing original as-built *performance* and *performance* for the period immediately before and immediately following completion of each capital project,
- k. all evaluations conducted to verify pre- and post-completion *performance* of the capital project under any equipment vendor guarantee,
- l. all work order and work request project completion reports,
- m. all associated purchase orders,
- n. state whether the capital project was associated with a life extension project, capacity increase, efficiency enhancement, or reliability improvement,
- o. *documents* related to the maximum continuous rating of the boiler, both before and after the project was completed, including, but not limited to, documentation of changes in:
 - i. unit capacity factor,
 - ii. unit availability,
 - iii. boiler heat input,
 - iv. steam flow rate,
 - v. steam temperature,
 - vi. steam pressure,
 - vii. unit heat rate, *Btu/MWh*, and
 - viii. unit efficiency.
- p. any risk analysis conducted by *AECI* or a third party on its behalf, including, but not limited to, average failures per year, average lost time per year, lost energy per event, and consequence of failure related to the component/section of the boiler that is going to be replaced or redesigned as part of the project, and

- q. all engineering analyses, correspondence, memoranda, telephone discussion summaries, and any other communications, including, but not limited to, Board of Directors reports, meeting minutes, and annual reports, that describe the benefits, provide justification for, or otherwise explain the nature, extent, cost, and frequency of each capital project. This request includes all communications both before and after the capital project was undertaken, and
- r. *documents* setting forth the final inputs and outputs for *production cost modeling or simulations* related to each specific project. For each responsive modeling or simulation, provide:
 - i. a brief description of the purpose of the modeling simulation and an explanation of the responsive files produced (i.e., identifying by name or bates number the files with the final inputs and outputs, those related to unit characteristics, output reports, users' manuals, etc.),
 - ii. *documents* relating to the development or discussion of input values related to the following unit characteristics: heat rate, forced outage rate, deratings, capacity, planned outage time, and emissions rates,
 - iii. all output reports created from the responsive modeling simulation, and the users' manual for the modeling software used for the simulation.

3. Provide the *GADS* performance, event, and unit design information described in Request Nos. 4, 5, and 6 below for each *coal-fired unit* at the *New Madrid Power Station* and the *coal-fired unit* at *Thomas Hill Power Station*. *NERC* can provide you with the reports described in sections a. through e. below, which if provided complete and unabridged will satisfy the requirements of Question Nos. 4, 5, and 6. In the alternative, you may authorize Region 7, on your behalf, to request the following files from *NERC*. If the *GADS* data from *NERC* are incomplete, supplement any missing information pursuant to Question Nos. 4, 5, and 6. If the data are not available from *NERC* or from company records, so indicate.

- a. *CSV GADS* performance files (*MSS format*) - *GADS* performance records parsed and labeled for easy read.
- b. *CSV GADS* event files (*MSS format*) - *GADS* event records parsed and labeled for easy read.
- c. *CSV GADS* quarterly performance summary reports (*MSS format*) - *GADS* quarterly statistical records parsed and labeled for easy read.
- d. *CSV GADS* annual performance summary reports (*MSS format*) - *GADS* annual statistical records parsed and labeled for easy read.
- e. *PDF GADS* design report (*MSS format*).

4. *GADS* Performance Report: For each calendar month from January 2009, to the present, provide the following *GADS* performance data, as the terms are defined in the "*GADS* Reporting Instructions (2011)", for each *coal-fired unit* at the *New Madrid Power Station* and the *coal-fired*

unit at Thomas Hill Power Station. The preferred format is in Microsoft Excel or comma separated value (CSV) format compatible with personal computers running Microsoft Windows XP operating system software or newer.

- a. Gross maximum capacity,
- b. Gross dependable capacity,
- c. Gross actual generation,
- d. Net maximum capacity,
- e. Net dependable capacity,
- f. Net actual generation,
- g. Typical unit loading characteristics,
- h. Attempted unit starts,
- i. Actual unit starts,
- j. Unit service hours,
- k. Reserve shutdown hours,
- l. Pumping hours,
- m. Synchronous condensing hours,
- n. Available hours,
- o. Planned outage hours,
- p. Unplanned (Forced) outage hours and startup failure hours,
- q. Maintenance outage hours,
- r. Extensions of scheduled outages,
- s. Unavailable hours,
- t. Period hours,
- u. Inactive hours,
- v. For each primary and secondary fuel, the
 - i. Fuel code,

- ii. Quantity burned,
- iii. Average heat content,
- iv. % ash,
- v. % moisture,
- vi. % sulfur,
- vii. % alkalines,
- viii. Grindability index, and
- ix. Ash softening temperature.

5. *GADS Event Report:* For each calendar month from January 2009, to the present, provide the following *GADS Events* data, as the terms are defined in the “*GADS Reporting Instructions (2011)*”, for each *coal-fired unit* at the *New Madrid Power Station* and the *coal-fired unit at Thomas Hill Power Station*. The preferred format is in Microsoft Excel or comma separated value (CSV) format compatible with personal computers running Microsoft Windows XP operating system software or newer.

- a. Event number,
- b. Event type,
- c. Start date and time of each outage,
- d. End date and time of each outage,
- e. Gross available capacity,
- f. Net available capacity,
- g. Dominant derating code,
- h. System-component cause code,
- i. Cause code amplification code,
- j. Time work started,
- k. Time work ended,
- l. Event contribution code,
- m. Problem alert,

- n. Man hours worked, and
 - o. Verbal description.
6. For the period from September 16, 2009, to the present, provide the *GADS* "Appendix E" Unit Design Data for each *coal-fired unit* at the *New Madrid Power Station* and for the *coal-fired unit Thomas Hill Power Station* for each calendar year. As an alternative, provide EPA Region 7 with written permission to obtain the *GADS* design data from *NERC*.
 7. For each year from 1992 to the present, provide all *worth of improving the performance* of each *coal-fired unit* or similar *documents* for the *AECI Plants*.
 8. For each year from 1992 to the present, provide all annual fuel or energy budgets prepared for the *AECI* system.
 9. For each year from 1992 to the present, provide all final annual reliability and/or availability projections for the *AECI* system, as well as any associated engineering work papers, calculations, correspondence or summaries.
 10. Provide all *documents* listing the actual *dispatch order* for units in the *AECI* system from 1987 to the present.
 11. Provide all *documents* listing the projected *dispatch order* for units in the *AECI* system from 1992 to the present.
 12. For the period January 1, 1992, to the present, provide:
 - a. *documents* setting forth the final inputs and outputs for *production cost modeling or simulations* related to
 - i. annual fuel planning or energy budgets for all units at the *AECI Plants*,
 - ii. the economic dispatch of all units at the *AECI Plants*,
 - iii. power pool operations and dispatch, and
 - iv. any projects identified in the Response to Request No. 13 of this Request.
 - b. For each responsive modeling simulation, provide:
 - i. a brief description of the purpose of the modeling simulation and an explanation of the responsive files produced (i.e., identifying by name or bates number the files with the final inputs and outputs, those related to unit characteristics, output reports, users' manuals, etc.),
 - ii. *documents* relating to the development or discussion of input values related to the following unit characteristics: heat rate, forced outage rate, deratings, capacity,

planned outage time, and emissions rates,

- iii. all output reports created from the responsive modeling simulation,
- iv. the users' manual for the modeling software used for the simulation, and
- v. any internal company guidance or policy documents on the use of the modeling software.

13. Provide a current list of capital projects expected to begin construction, any other *documents* that set forth or identify the operational or equipment changes, or the projected capital expenditures that will be made to the *AECI Plants* in the next 24 months. The list and/or *documents* should include, but is not limited to, the information set forth in Request No. 1, above.

ENCLOSURE 2

INSTRUCTIONS

1. Provide a separate narrative response to each question and subpart of a question set forth in the Information Request.
2. Precede each answer with the number of the question to which it corresponds and at the end of each answer identify the person(s) that provided information that was used or considered in responding to that question, as well as each person that was consulted in the preparation of that response.
3. Indicate on each document produced in response to this Information Request, or in some other reasonable manner, the number of the question to which it corresponds.
4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
5. Where documents or information necessary for a response are neither in your possession nor available to you, indicate in your response why such documents or information is not available or in your possession and identify any source that either possesses or is likely to possess such information.
6. In the event that it is necessary for *AECI* to secure the agreement of any other party or entity to produce any of the information covered by these requests, for example, due to any license agreements or confidentiality claims by a software firm, please contact the other party or entity to seek authorization in order to permit disclosure of the requested information. Should you be unable to secure such authorization from any other party or entity with a confidentiality or proprietary claim over the requested information, please specifically identify the nature of the issue preventing the disclosure of that information in this response.

DEFINITIONS

All terms used in this Request for Information will have their ordinary meaning unless such terms are defined in the Act, 42 U.S.C. § 7401, 40 C.F.R. Part 52 (which incorporates the federally-approved Stated Implementation Plan), or other Clean Air Act implementing regulations. Reference is made to the EPA regulatory provisions only; however, you should apply the applicable federally-approved state provisions when appropriate. Definitional clarification is specified below.

7. *Btu* shall mean the British Thermal Unit of heat.
8. *Capital Appropriation Requests* shall mean the documents used by plant personnel that describe capital projects for equipment and process changes when seeking management approval for a planned expenditure at the plants. These documents are also known as capital improvement requests, authorizations for expenditure, work order records, or other similar names.
9. *Coal-Fired Boiler* or *Coal-Fired Unit* shall mean all equipment used for the purpose of generating electricity including but not limited to coal handling facilities, boilers, ductwork, stacks, turbines, generators, and all ancillary equipment.

10. *CSV GADS* is information provided in comma separated value format, which is machine readable by Microsoft Excel.
11. *Document* and *Documents* shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any document.
12. *GADS* shall mean the "General Availability Data System" maintained by the North American Electric Reliability Corporation.
13. *MSS format* is NERC's Manufacturer's Support System, a service they provide to manufacturers to see problems with their own equipment.
14. *MWh* shall mean megawatt hours of electrical energy.
15. *NERC* is the North American Electric Reliability Corporation.
16. *Performance* shall mean capability of the coal-fired boiler to burn greater amounts of coal on an hourly or annual basis, improve availability, or achieve higher efficiency.
17. *Production cost modeling or simulations* specifically refers to any simulations done using any version of RTSim (<http://rtsim.com/>), PROMOD, PROSYM, ProScreen, Energy Costing Program (ECP), Strategist, or similar modeling software packages.
18. *AECI Plants* shall mean the two coal-fired power plants owned or operated in Missouri by AECI, including New Madrid and Thomas Hill.
19. *PSD/NSR* shall mean the Prevention of Significant Deterioration and the New Source Review preconstruction permitting programs established at 40 C.F.R. 51 and 52 and any respective program established under a state implementation plan.
20. *You* or *AECI* or *Associated Electric Cooperative, Inc* shall mean the addressee of this Request, the addressee's officers, partners, managers, employees, contractors, trustees, successors, predecessors, assigns, and agents.

ENCLOSURE 3

CONFIDENTIAL BUSINESS INFORMATION

You may assert a business confidentiality claim covering all or part of the information you provide in response to this information request for any business information entitled to confidential treatment under Section 114(c) of the Clean Air Act (the Act), 42 U.S.C. § 7414, and 40 C.F.R. Part 2, subpart B. Under Section 114(c) of the Act, you are entitled to confidential treatment of information that would divulge methods or processes entitled to protection as trade secrets. Under 40 C.F.R. Part 2, subpart B, business confidentiality means "the concept of trade secrecy and other related legal concepts which give (or may give) a business the right to preserve the confidentiality of business information and to limit its use or disclosure by others in order that the business may obtain or retain business advantages it derives from its rights in the information." See 40 C.F.R. § 2.201(e).

The criteria EPA will use in determining whether material you claim as business confidential is entitled to confidential treatment are set forth at 40 C.F.R. §§ 2.208 and 2.301. These regulations provide, among other things, that you must satisfactorily show that: (1) the information is within the scope of business confidentiality as defined at 40 C.F.R. § 2.201(e), (2) that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so, (3) the information is not and has not been reasonably obtainable by legitimate means without your consent, and (4) the disclosure of the information is likely to cause substantial harm to your business's competitive edge. See 40 C.F.R. § 2.208 (a)-(d). Emission data, as defined at 40 C.F.R. § 2.301(a)(2), is expressly not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B. See 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301(e).

Information covered by a claim of business confidentiality will be disclosed by EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the Act and 40 C.F.R. Part 2, subpart B. EPA will construe your failure to furnish a business confidentiality claim with your response to this information request as a waiver of that claim, and the information may be made available to the public without further notice to you.

To assert a business confidentiality claim, you must place on (or attach to) all information you desire to assert as business confidential either a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret," "proprietary," or "company confidential" at the time you submit your response to this information request. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by EPA. You should indicate if you desire confidential treatment only until a certain date or until the occurrence of a certain event.

In addition, EPA is providing you notice that if you assert a claim of business confidentiality for information you provide in response to this information request, EPA will determine whether such information is entitled to confidential treatment, pursuant to 40 C.F.R. Part 2, subpart B. Accordingly, after EPA's receipt of your business confidentiality claim, you will receive a letter inviting your comments on the following questions:

1. What specific portions of the information are alleged to be entitled to confidential treatment? Specify by page, paragraph, and sentence when identifying the information subject to your claim.
2. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, specify that event. Additionally, explain why the information should be protected for the time period you have specified.
3. What measures have you taken to protect the information claimed as confidential from undesired disclosure? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity whether disclosure of the information is likely to result in substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Is there any other explanation you deem relevant to EPA's determination of your business confidentiality claim that is not covered in the preceding questions? If so, you may provide such additional explanation.

See 40 C.F.R. § 2.204(e)(4). When you receive such a letter, you must provide EPA with a written response within the number of days set forth in the letter. EPA will construe your failure to furnish timely comments as a waiver of your confidentiality claim, consistent with 40 C.F.R. § 2.204(e)(1).

ENCLOSURE 4

STATEMENT OF CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

(Signature)

(Title)

(Date)